San Marino Island
Di Lido Island
Belle Island
Biscayne Island
MacArthur Causeway
San Marco Island
Rivo Alto Island
MIAMI BEACH
Watson Park
TURNING BASIN
Hibiscus Island
Palm Island
MacArthur Causeway
Star Island
EXISTING 36-FOOT PROJECT
EXISTING 42-FOOT PROJECT
EXISTING 44-FOOT PROJECT
DODGE ISLAND
LUMMUS ISLAND
Claughton Island
FISHERMAN'S CHANNEL
42-FOOT PROJECT
EXISTING 42-FOOT PROJECT
34-FOOT PROJECT
Norris Cut
Fisher Island
Government Cut
VIRGINIA KEY D/A
BISCAYNE BAY
ATLANTIC OCEAN

Miami Harbor, FL Navigation Study

Step 4 – Evaluation of Alternative Plans

Step 5 – Comparison of Alternative Plans

Step 6 – Selection of the Recommended Plan

Evaluated Alternatives

- Plan A: No Action Plan
- Plan B: Widen the Channel (Measures 1C, 2A, and 5A)
- Plan C: Extend the Fisher Island Turning Basin (Measure 3B)
- Plan D: Widen the Channel (Measures 1C, 2A, and 5A) and Extend the Fisher Island Turning Basin (Measure 3B)

Evaluated Alternatives (cont'd)

- Plan E: Deepen the Previously-Authorized Channel Configuration
- Plan F: Widen the Channel (Measures 1C, 2A, and 5A) and Deepen the Resulting Channel Configuration
- Plan G: Extend the Fisher Island Turning Basin (Measure 3B) and Deepen the Resulting Channel Configuration

Evaluated Alternatives (cont'd)

- Plan H: Widen the Channel (Measures 1C, 2A, and 5A), Extend the Fisher Island Turning Basin (Measure 3B), and Deepen the Resulting Channel Configuration.
- Plan I: Consists component 6 and 6A.

RECOMMENDED PLAN

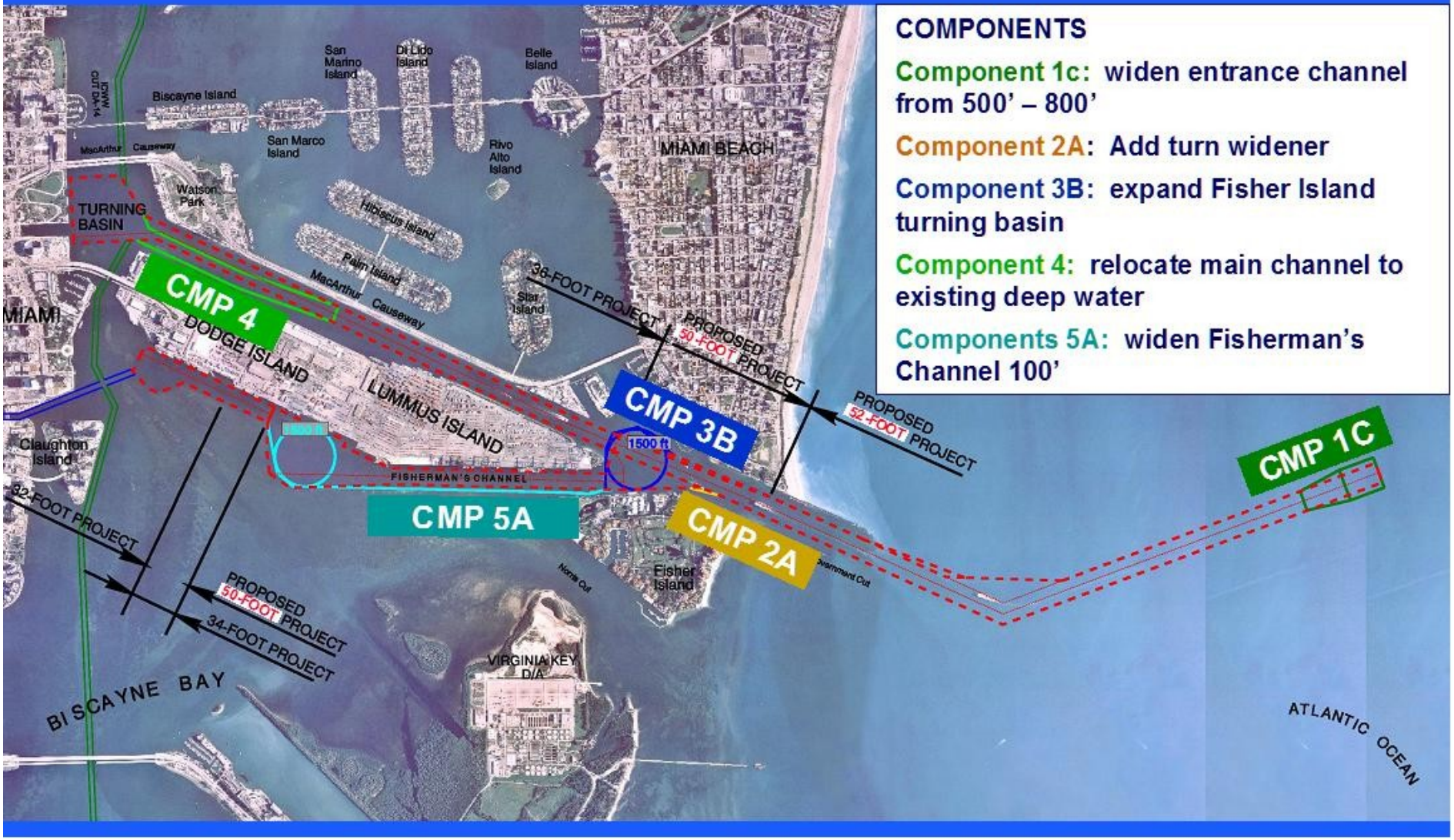

Table A-91: Costs and Benefits of Alternative Plans

Alternative Plan	AAEQ Total Costs	AAEQ Benefits	Net AAEQ Benefits	Benefit/Cost Ratio
Alternative Plan A: No Action	$0	$0	$0	n/a
Alternative Plan B: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel	$1,455,400	$2,848,000	$1,392,600	1.96
Alternative Plan C: 3B Extend Fisher Island Turning Basin	$237,618	$1,292,000	$1,054,382	5.44
Alternative Plan D: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin	$1,693,018	$4,140,000	$2,446,982	2.45
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 43 Feet	$6,114,057	$6,677,622	$563,565	1.09
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 44 Feet	$6,957,462	$8,928,182	$1,970,720	1.28
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 45 Feet	$7,480,398	$11,001,376	$3,520,977	1.47
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 46 Feet	$7,939,366	$12,588,243	$4,648,878	1.59
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 47 Feet	$8,540,576	$13,879,422	$5,338,846	1.63
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 48 Feet	$9,245,022	$15,103,202	$5,858,180	1.63
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 49 Feet	$10,140,267	$16,231,586	$6,091,320	1.60
Alternative Plan H: 1C Widen Entrance Channel, 2A Widener between Buoys 13 and 15, 5A Widen Fishermans Channel and 3B Extend Fisher Island Turning Basin, and Deepen Channel to 50 Feet	$10,788,596	$16,261,972	$5,473,376	1.51

ECONOMIC SUMMARY

(Locally Preferred Plan = 50 feet)

Estimated Implementation Costs

Federal	$ 65,600,000	(41%)
Non-Federal	$ 96,400,000	(59%)
Total	$162,000,000	(100%)

Average Annual Benefits & Costs

Annual Benefits	$ 14,740,000
Annual Costs	$ 10,650,000
Net Benefits	$ 4,090,000

Benefit to Cost Ratio: 1.4 (Price Level Oct. 2004 & Discount Rate 5. 375%)

What Happened to MH?

- Chief’s Report signed 25 April 2005
- ASA(CW) approval 23 February 2006
- OMB clearance 5 May 2006
- Sent to Congress
- Authorized WRDA 2007
- Construction underway